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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/522,341

01/25/2005

Michael Kock

12810-00057

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23416 7590 11/13/2008
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EXAMINER

ZHENG, LI

ART UNIT

PAPER NUMBER

1638

MAIL DATE

DELIVERY MODE

11/13/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/522,341	Applicant(s) KOCK ET AL.	
	Examiner LI ZHENG	Art Unit 1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on August 20, 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-34 is/are pending in the application.
- 4a) Of the above claim(s) 11-20 and 27-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-10,21-26 and 32-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 20, 2008 has been entered.

2. Claims 1 and 3-34 are pending.

Claims 11-20 and 27-31 are withdrawn for being drawn to non-elected inventions.

Claims 1, 3-10, 21-26 and 32-34 are examined on the merits.

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. The objections and rejection not set forth in this office action are withdrawn.

Claim Rejections - 35 USC § 103

5. Claims 1, 3-10, 21-26 and 32-34 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Maliga et al. (March 29, 2001, WO 01/21768) in view of Smith et al. (2000, *Nature*, 407:319-320) and Applicants' admitted prior art, for the reasons of record stated in the Office action mailed February 22, 2008. Applicants traverse in the paper filed August 20, 2008. Applicants' arguments have been fully considered but were not found fully persuasive.

Applicants argue that the reference of Maliga et al. is aimed to remove the selection marker gene from the plasmid genome. Applicants also argue that Maliga et al. do not teach or suggest that the effect of the selection marker gene could be reduced by using dsRNA of the marker protein gene without removing the gene out of the genome (response, page 14, 1st paragraph). Applicants further argue that Smith does not remedy such deficiency ((response, page 14, 2nd paragraph). Applicants conclude that since the art does not teach suggest or motivate the specific series of steps which constitute an unobvious way of using the marker protein genes, the combination of Maliga and Smith, even taken together with the knowledge of the art, does not support a finding of obviousness (response, the paragraph bridging pages 14-15).

The Office contends the combined teachings of Maliga et al. in view of Smith et al. teach all the limitation set forth by instant claims, The Office further contends that the instant rejection is not based on mere conclusory statements but on articulated

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reasoning with rational to support the rejection as discussed in the previous Office action mailed February 22, 2008. The Office contends again that given the teaching that lacking codA expression can be readily used for a negative selection, it would have been obvious for a person with ordinary skill in the art to choose from a finite number of known methods to reduce or eliminate the expression of codA. For example, it would have been obvious for a person with ordinary skill in the art to try using homologous recombination to remove the codA from the genome as taught by Maliga et al. Alternatively, given the teaching of Smith et al., it would also have been obvious to try using hairpin silencing construct to inhibiting the expression of codA gene. A person skilled in the art would expect a reasonable success of taking the dsRNA gene silencing approach as taught by Smith et al. to achieve the effect of “lacking coda expression” in the plant cells.

Summary

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li Zheng whose telephone number is 571-272-8031. The examiner can normally be reached on Monday through Friday 9:00 AM - 5:30 PM EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on 571-272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Li Zheng/

Examiner, Art Unit 1638